

## GENERAL NOTES

ETS 4-E-1306A AND 4-E-1306B)

(FOR

1. WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS, DATED JULY 2006, CITY OF FRESNO STANDARD SPECIFICATIONS AND DRAWINGS AND THE SPECIAL PROVISIONS OF THE PROJECT SPECIFICATIONS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THESE PLANS AND SHALL PROVIDE PROTECTION PRIOR TO, DURING, AND AFTER TRENCHING, JACKING AND/OR BORING. CONTACT UNDERGROUND SERVICE ALERT (USA), TOLL FREE AT 811, AT LEAST 2 WORKING DAYS BEFORE EXCAVATING.

- THESE PLANS ARE ACCURATE FOR ITS WORK ONLY, AS NOTED ON THE PLANS.
- 4. ALL ITS FACILITIES, INCLUDING THE CABINET, IP VIEWING DEVICE STANDARDS, VAULTS, CONDUITS, ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL MARK FINAL LOCATIONS IN THE FIELD AND NOTIFY THE ENGINEER AT LEAST 2 WORKING DAYS PRIOR TO COMMENCING WORK TO VERIFY MARKED LOCATIONS.
- CONTRACTOR SHALL ARRANGE WITH UTILITY COMPANIES FOR ALL REQUIRED UTILITY RELOCATIONS, INCLUDING OVERHEAD CONFLICTS.
- 6. EQUIPMENT SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AS PER EXHIBITS NOTED ON SHEET 4-E-1306B.

  7. ALL ITS CONDUITS SHALL BE SDR-11 COMMSCOPE HDPE COMMUNICATIONS AND PLACED PER GENERAL ORDER 128 (G.O. 128).

  ALL TRENCH OR BORING OF ITS CONDUITS SHALL HAVE A WHITE TONEABLE CONDUIT USED SHALL BE WHITE (TONEABLE), BLUE,

  GREEN, YELLOW, RED AND ORANGE. A PULL TAPE SHALL BE INSTALLED IN ALL CONDUITS WITH OR WITHOUT FIBER OPTIC CABLES.
- 8. THE CONTRACTOR SHALL MOVE FIBER OPTIC CABLES PRIOR TO ANY CONSTRUCTION. FIBER OPTIC CABLES SHALL BE REMOVED, MOVED OUT OF HARMS WAY, AND SECURED PRIOR TO PENETRATING EXISTING VAULT AND INSTALLING CONDUIT PER PLAN. VAULT SHALL BE CLEANED AND RESTORED TO ORIGINAL CONDITION.
- 9. FIBER OPTIC COIL DIAMETER (MIN. 3 FT.) SHALL BE MAINTAINED WHEN REMOVING FROM VAULTS, SECURING OUTSIDE VAULTS, AND REPLACING WITHIN VAULTS. FIBER OPTIC CABLES SHALL BE RESTORED TO ORIGINAL CONFIGURATION, COILED AND VERTICALLY SECURED TO VAULT WALL OR BRACKET.

  10. FIBER OPTIC CABLES SHALL BE PROTECTED FROM ALL POTENTIAL SOURCES OF DAMAGE SUCH AS PEDESTRIANS, VEHICLES, CONSTRUCTION EQUIPMENT AND MATERIALS OR ANY OTHER POTENTIAL SOURCES OF DAMAGE SUCH AS BUT NOT LIMITED TO PROTRUSIONS OF CONCRETE, STEEL, GLASS.
- 11. FIBER OPTIC CABLE IDENTIFICATION LABELS SHALL BE RESTORED OR REPLACED IF LABELS ARE DAMAGED OR REMOVED DURING REMOVAL, RELOCATION, OR REPLACEMENT OF CABLES IN VAULTS OR CABINETS.

  13. FIRER OPTIC CABLE (COMSCORE 7WP & COLINIT SINGLE MODE FIRER) AND DOLLBLE SHIFLDED CAT NO & CABLE SHALL BE
- 12. FIBER OPTIC CABLE (COMSCOPE ZWP 6 COUNT SINGLE MODE FIBER) AND DOUBLE SHIELDED CAT NO. 6 CABLE SHALL BE INSTALLED FROM 4'X7' VAULT NEAR COMMUNICATIONS CABINET (RITTALL MODEL NO. FRESNO 007) TO THE 3'X5' VAULT AT IP VIEWING DEVICE LOCATIONS. PLACE 75 FEET OF EXCESS FIBER OPTIC CABLE AND DOUBLE SHIELDED CAT NO. 6 CABLE IN EACH VAULT COILED, LABELED, AND SECURED VERTICALLY TO VAULT WALL OR BRACKET. CITY OF FRESNO TRAFFIC/ITS STAFF SHALL BE CONTACTED TO MAKE THE FIBER AND CAT NO. 6 CABLE CONNECTIONS TO IP VIEWING DEVICE AND COMMUNICATIONS CABINET.
- CONTRACTOR SHALL INSTALL RACK MOUNTED FIBER DISTRIBUTION UNIT (FDU) IN COMMUNICATIONS CABINET (R2D2).

  CONTRACTOR SHALL INSTALL SC FIBER OPTIC CONNECTORS TO MATCH EXISTING.
- 15. MULE TAPE SHALL BE INSTALLED WITHIN ALL ITS CONDUIT INSTALLATIONS. THE MULE TAPE SHALL HAVE 50 FEET OF EXCESS TAPE AT EACH VAULT, WRAPPED, LABELED, AND PLACED AT THE BOTTOM OF THE VAULTS. PULL TAPE SHALL HAVE A PULL STRENGTH OF 1,800 LBS. PULL TAPE SHALL BE "NEPTCO" MULE TAPE OR APPROVED EQUAL. ALL CONDUITS SHALL ALSO BE CAPPED WITH CONDUITS CAPS.
- 16. ITS VAULT AT THE SOUTH WEST CORNER, ADJACENT TO IP VIEWING DEVICE POLE, SHALL BE TWO TIERED DESIGN TO ACCOMMODATE RELOCATION OF THE FIBER OPTIC CONDUIT AND CABLES FROM EXISTING VAULT. THE EXISTING VAULT SHALL BE ABANDONED IN PLACE.

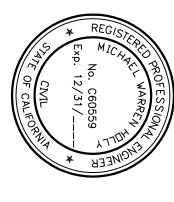
  17. UNDER THE SUPERVISION OF THE CITY OF FRESNO TRAFFIC/ITS STAFF, THE FIBER OPTIC CABLES AND FIBER OPTIC CONDUIT EXTENSIONS (COMPRESSION FITTINGS) SHALL BE RELOCATED TO THE NEW ITS VAULT BY CITY APPROVED CONTRACTOR LICENSED BY STATE LICENSING BOARD (C7 LICENSE) IN COMMUNICATIONS FOR THE INSTALLATION, TESTING, AND REPAIR OF FIBER OPTIC CABLES. GREAT CARE SHALL BE EXERCISED TO SECURE THE SAFE TRANSFER OF THE FIBER OPTIC CABLES TO THE NEW VAULT.
- 18. COMPRESSION CONDUIT FITTINGS SHALL BE USED TO EXTEND CONDUIT(S) AND REDIRECT FIBER OPTIC CABLES FROM EXISTING VAULT TO NEW ITS VAULT. EXISTING VAULT SHALL BE ABANDONED IN PLACE TO PREVENT THE TRANSMISSION OF ANY MOTION AND/OR VIBRATION TO THE FIBER OPTIC CABLES. ABANDONED VAULT SHALL BE FILLED WITH 2 SACK SLURRY. ALL CONDUIT FITTINGS SHALL BE MADE WATER PROOF.
- 19. UNDER THE SUPERVISION AND AT THE DISCRETION OF THE CITY OF FRESNO TRAFFIC/ITS STAFF, FIBER OPTIC CABLE SPLICES AND TERMINATIONS SHALL BE OTDR TESTED (BEFORE AND AFTER INSTALLATION) AND REPORT GENERATED (ELECTRONIC AND PAPER COPY) BY A CITY APPROVED CONTRACTOR LICENSED BY THE STATE LICENSING BOARD WITH A (C7 LICENSE) IN COMMUNICATIONS FOR THE INSTALLATION, TESTING, AND REPAIR OF FIBER OPTIC CABLES.
- INTELLIGENT TRANSPORTATION SYSTEM SHALL BE OPERATIONAL AND RESTORED IN KIND UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE BORE LOG/TRENCH LOG IN EXCEL FORMAT.
- CONTRACTOR SHALL PROVIDE FINAL AS-BUILT IN SCANNED/CAD/COLOR COPY.

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= INTELLIGENT TRANSPORTATION SYSTEM.)

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		Ref. & Rev.	KRA 0101001000	Proj. ID. PW00150	PW File No. 10290
EXHIBIT SHEET	INTERSECTION INSTALLATION/RELOCATIONS	N. BRAWLEY. AVE. & E. HERNDON AVE.	SLI	CHY OF FRESNO	
Date: Scale: As Noted	$CATIONS = \begin{bmatrix} CAD & By: \\ Ch. & By: \\ Ch. & By: \end{bmatrix}$ . García of		Project Mgr		Department of Public Works
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